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REMARKS

Claims 1-28 were pending in the application. In response to the office action, applicants have amended claims 17, 20, 23, and 24. Claims 1-28 remain pending for reconsideration.

Claims 20 and 23 were objected to because of informalities. Applicants wish to thank the Examiner for his careful review of the claims and have amended claims 20 and 23 editorially in accordance with the Examiner's guidance. No claim scope or equivalents are surrendered by way of these editorial amendments.

Claims 17-21 and 24-25 are rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 6,308,265 (Miller). Applicants respectfully traverse this rejection for the following reasons.

Applicants have amended the claims to more clearly distinguish over the cited reference. Specifically, applicants have clarified that some embodiments of the invention involve modifying an address bit in the execution address and maintaining the state of the address bit during a power cycle. Miller does not teach or suggest these features.

As noted in the office action, Miller discloses only setting a flag when a boot block is being update (see Miller at col. 5, lines 65-67). The setting of a flag is different from and does not teach or suggest modifying an address bit of the execution address.

For example, some implementations of the invention as recited in claims 17, 20 and 24 may have advantages over the flag utilized in Miller. As described in connection with Fig. 4 of Miller, additional parts and operations are required to utilize the flag. Some implementations of the present invention may omit or reduce the number of extra parts or operations required by modifying and maintaining the state of the address bit of the execution address.

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Because Miller does not teach or suggest modifying an address bit of the execution address and maintaining the state of the address bit during a power cycle, claims 17, 20, and 24 are each not anticipated by and are patentable over Miller. The respective dependent claims 18-19, 21, and 25 are likewise patentable.

Claim 6 is rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,665, 813 (Forsman) in view of Miller. Applicants respectfully traverse this rejection for the following reasons.

Applicants first note that precisely which claims are rejected over Forsman in view of Miller is unclear. Only claim 6 is identified in the rejection, but claims 7-8, 10-11, 1, 12, 26, 2-5, 13-16, and 27-28 each receive some discussion. If any of these rejections are maintained, applicants respectfully request clarification in a new non-final office action, so that a full and fair response may be made.

In any event, the office action misconstrues the Forsman reference. Forsman teaches only the conventional arrangement including a boot block which cannot be updated. Forsman describes two types of boot code. "Write protected code that cannot be updated, but it can also not be corrupted. Read/write code can be updated, but there is the potential for corruption, so a recovery mechanism must be provided." See Forsman, col. 4, lines 62-65. Forsman is directed primarily to the recovery of firmware code, not an update to the boot block. As further described in Forsman at col. 5, lines 44-46, "a first step in the process (step 402) is to execute the write protected code, as shown as code 302." One of ordinary skill in the art would recognize the write protected code 302 as the boot block, while recovery code A and B would be recognized as simply other firmware code.

Claim 6 recites a "boot block" and a "second boot block". Claim 6 also recites an "execution address". The office action relies on the recovery code A for the recited boot block and recovery code B for the recited second boot block. However, as is clear from the foregoing, the system of Forsman will always begin execution at the block 302 (e.g.

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the only boot block actually described in Forsman) and will never begin boot execution at either of the recovery codes A or B. Accordingly, neither of the recovery codes A or B are boot blocks and the execution address will never point to either of recovery codes A or B. One of ordinary skill in the art would appreciate that the recited "execution address" is different from an instruction pointer address, as might be applicable to the execution of the recovery codes A or B, following the execution of the block 302 at boot time.

Because, among other things, Forsman does not teach or suggest the recited boot block executed from the primary location, wherein the boot block further: receives a second boot block into the secondary location; copies the second boot block to the primary location; and points the execution address to the primary location, no combination of Forsman and Miller can establish a prima facie case of obviousness against claim 6. Claims 7-11 depend from claim 6 and are likewise patentable.

Miller, which is relied upon for other aspects, does not overcome the fundamental deficiencies in the primary Forsman reference. Specifically, the office action asserts that Miller suggests various modification to Forsman in the handling of recovery codes A or B, or the execution address. However, because recovery codes A and B are not boot blocks, even if such modifications are made, the modification still fails to read on the claims. Moreover, the various modifications to the execution address of Forsman, asserted to be suggested by Miller, to point the execution address to either of recovery codes A or B would result in an inoperative system. Specifically, because recovery code A and B are not boot blocks, if the execution address of Forsman pointed to recovery code A or recovery code B, the system would simply not boot and would be inoperative.

Claims 1, 12, and 26 are apparently rejected for the same reasons as claim 6. However, each of claims 1, 12, and 26 include recitations which do not appear in claim 6. The office action improperly relies on the rejection of claim 6 as reading on claims 1, 12, and 26 without addressing each and every recitation of the claim. For example, each of claims 1 and 12 recite the execution address is the address from which a processor

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executes instructions when a system is turned on. In the rejection of claim 6, the office action fails to address this further recitation in connection with the execution address. Claim 26 includes entirely different recitations as compared to claim 6. Because the office action does not identify how all the recitations of claims 1, 12, or 26 are allegedly taught or suggested by Forsman or Miller, the office action fails to establish a prima facie case of obviousness with respect to claims 1, 12, and 26.

In any event, claims 1 and 12 also recite other features related to boot blocks and the execution address which are absent from Forsman and Miller. Accordingly, the office action fails to establish a prima facie case of obviousness against claim 1 or 12. Claims 2-5 depend from claim 1 and are likewise patentable. Claims 13-16 depend from claim 12 and are likewise patentable.

With respect to claims 10-11, applicants first note that the office action incorrectly asserts that "Miller teaches maintaining the state of an address bit ..." (emphasis added). As discussed above, Miller at most teaches maintaining the state of a flag, not an address bit. The office action then admits that Miller is silent with respect to the recitations of claims 10-11, but asserts, without support from the Miller reference, that such modifications to Miller would be obvious. The Examiner appears to be relying on an inherency argument. However, as the Examiner is well aware, numerous forms of non-volatile circuits are well known in the art to preserve the state of a flag bit upon power failure. Accordingly, it is not inherent or obvious that Miller would practice the particular recitations of claims 10-11. The only motivation to modify Miller in the manner suggested in the office action, appears to come impermissibly from the teachings of the present specification. These arguments apply with equal force to claims 22-23 below.

With respect to claim 27, the office action completely fails to address the recitations of this claim.

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Claims 22-23 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Miller. Applicants respectfully traverse this rejection for the reasons given above with respect to claims 10-11.

Claim 9 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Forsman in view of Miller, further in view of U.S. Patent No. 5,987,605 (Hill). Applicants respectfully traverse this rejection for the following reasons.

The office action admits the deficiencies in Forsman and Miller, but does not set forth how Hill allegedly makes up for these deficiencies. Hill is not even mentioned in the analysis. Accordingly, the office action fails to establish a prima facie case of obviousness. If the rejection is maintained, a new non-final action is respectfully requested clarifying the Examiner's position, so that a full and fair response may be made.

In any event, Hill fails to make up for the deficiencies in the primary reference Forsman noted above in connection with claim 6.

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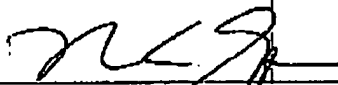
In view of the foregoing, favorable reconsideration and withdrawal of the rejections is respectfully requested. Early notification of the same is earnestly solicited. If there are any questions regarding the present application, the Examiner is invited to contact the undersigned attorney at the telephone number listed below.

Respectfully submitted,

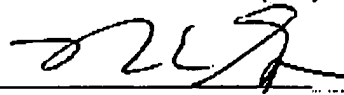
October 15, 2004

Date

Intel Americas, LF3
4030 Lafayette Center Drive
Chantilly, VA 20151


Paul E. Steiner
Reg. No. 41,326
(703) 633 - 6830

I hereby certify that this correspondence is being facsimile transmitted to the United States Patent and Trademark Office at (703) 872-9306 on October 15, 2004.

Paul E. Steiner 

Date: October 15, 2004

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